USCMS Engineer Status Report for July 2003

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1   Work Performed This Month

DDD:

OSCAR: Confirmed to Maya Stavrianakou that the DDD can load two different configuration.xml files. She needed to use this feature to prevent magnetic field volumes from interfering with geometry volumes in OSCAR as OSCAR uses the DDD to build its geometry.

HCAL (sort-of): Sunanda Banerjee and I discovered some bugs in the newer (or unused so far) features of the DDD. These were tracked down and fixed.

Testbeam: EMU testbeam XML checked in to Geometry project CVS with instructions, etc.

Release: Worked to make sure DDD as released inside COBRA 7.8.6 pre2 and COBRA 8.0.0 pre1 included the most recent features and bug fixes.

Tutorial: Finished for now.

Conditions Database:

Gave another status report to the CMS HCAL/EMU/Pixel database group on what I've been doing, learning and thinking about in July.

Existing DBs: Connected and started using the EMU Conditions database and the HCAL database(s) at Fermilab. This included getting local access to devdb9.cern.ch, installing some GUI SQL tools on my laptop, and asking people in other groups to allow me read access to their databases. This has been very helpful.

Software: Started using the Relational Abstraction Layer of the LCG POOL Project, to read and write databases. Mostly were my own simple play tables. Next will be reading from the existing databases.

Planning: Started to meet more with people who are working on databases here at CERN. Also expect that this will become time-consuming. There are efforts from Dubna, Fermilab and CERN all having to do with databases and condition or calibration information. Dirk DuellMann presented a talk on how to form a common project in LCG for distributed databases. This talk triggered people asking me to arrange a CMS meeting to ask him questions to understand this more. As a consequence I asked David Stickland if we could use the CCS Technical Meeting he had already arranged and he agreed. User Support:

I continue to work with people using the DDD, using ORCA and OSCAR (at UC Davis) as well as with developers here at CERN.

2 Status of Deliverables

RPROM Talk for Monday status: not even started. I am supposed to present to the RPROM what I think I know, what I think we need, and ask for help from those made responsible for the ORCA work from the PRS groups.
September seems too soon for a target date of using a prototype conditions database framework for CMS. So not sure how to state this status. A non-framework version just for the test beam may be a better way to think about this.
I have to prepare a CHEP 2004 presentation. For me, this will be time-consuming.

3 Plans For Next Month

Continue working on the DDD in COBRA 8.0.0 pre-releases.
Continue working on the original Conditions DB prototype by Martin Liendl and Zhen Xie.
Continue working on reading data from existing database tables as provided by the sub-detector groups.

4 Links To Supporting Documentation

- http://agenda.cern.ch/fullAgenda.php?ida=a043431

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- http://cmsdoc.cern.ch/cms/software/ddd/www/xmltutorial/index.html

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- http://agenda.cern.ch/fullAgenda.php?ida=a043438